

Alameda County Congestion Management Agency

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX: (510) 836-2185 E-MAIL: mail@accma.ca.gov • WEB SITE: accma.ca.gov

Memorandum

March 9, 2009 Agenda Item 6.1

Date:

February 27, 2009

To:

Sunol Express Lane Joint Powers Authority

From:

Ray Akkawi, Manager of Project Delivery

Subject:

I-680 Express Lane Project: Location of the Toll Data Center

Action Requested

The Toll Data Center (TDC) is the physical room in which the computer servers used to operate the Electronic Toll System (ETS) reside. It needs to be properly cooled, monitored and connected to the communications network. It also needs to be in a secure facility. The determination of the TDC location is needed finalize the architectural design of the ETS communication plan. Staff is recommending that the Board approve the recommendation to locate the Toll Data Center at ACCMA Offices.

Discussion

The Electronic Toll System (ETS) is controlled by a set of several servers that must be housed in an appropriate location that is adequately secured and properly ventilated with sufficient telecommunications access to link to the ETS equipment installed along the Sunol Corridor. There are several locations that can house the TDC; ACCMA Office, BATA Regional Customer Service Center (RCSC), Santa Clara Valley Transportation Authority (SCVTA) Offices, and private vendors.

Staff recommends that the TDC be located at the ACCMA Offices given that the facility currently exists, no contract is needed for implementation, the server room is adequate and it can also accommodate the I-580 Express Lane needs.

The attached Decision Document 09-001 discusses the requested action, the different options available, and the financial impact to the project.

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I-680 HOV/EXPRESS LANE PROJECT

Decision Document No. 09-001

DECISION

The Toll Data Center for the I-680 Express Lane will be located at the ACCMA Offices at 1333 Broadway, Oakland.

PROJECT DESCRIPTION

The Electronic Toll System (ETS) is controlled by a set of servers that must be housed in an appropriate location. This adequately secured location must have a properly ventilated and cooled room with sufficient telecommunications access to link to the ETS equipment installed along the Sunol Corridor. This site is referred to as the Toll Data Center (TDC).

One of the servers hosted at the TDC will capture the traffic data, determine the toll rate and then send the trip costs to the Dynamic Message Signs. The other server will capture the FasTrak transponder information read by the readers in the field, calculate the toll to be charged to the account assigned to the identified transponder and then transmit that information to the BATA Regional Customer Service Center for collection.

OPTIONS

ACCMA Office: The ACCMA Offices have a server room sized sufficiently to serve as the I-680 Express Lanes TDC and as well as the I-580 Express Lane TDC. The building is adequately secured. The room is cooled and has good telecommunications access.

BATA Regional Customer Service Center (RCSC): The RCSC could be properly outfitted to serve as the TDC for all of the Bay Area Express Lanes.

Santa Clara Valley Transportation Authority (SCVTA) Office: The Santa Clara Valley Transportation Authority Offices also have a server room sized sufficiently to serve as the Bay Area TDC.

Contracted Server Farm: There are vendors who provide servers for remote use by others. The fee for this service would include all of the necessary features needed for a TDC. This arrangement is being used for the Alameda Smart Corridor Project.

FINANCIAL STATUS

The estimate for the Project has assumed that the TDC would be housed at the ACCMA Office. The initial cost to implement this solution is minimal, since the facility is already available and no additional contracts or agreements are needed to implement.

There will be an on-going cost to the ACCMA for hosting the TDC for which the JPA would be financially responsible. This cost will be determined during the ETS design phase.

SCHEDULE STATUS

The System Integrator has been given Notice to Proceed for the final design of the ETS. This decision is needed in order to facilitate timely completion of the design.

RECOMMENDATION

The staff recommends that the TDC be located at the ACCMA Offices given that the facility currently exists, no contract is needed for implementation, the server room is adequate, and it can accommodate I-580.